

# THE CALIFORNIA VETERINARIAN



THE CALIFORNIA STATE  
VETERINARY MEDICAL  
ASSOCIATION

**65th ANNUAL  
CONVENTION**

JUNE 22-23-24, 1953  
LONG BEACH, CALIFORNIA

JANUARY - FEBRUARY  
1953



## DOCTOR, PLEASE!

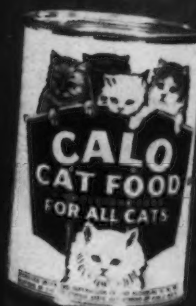
Calo endeavors to safeguard its long and favorable relationship with the Veterinary Profession; treasuring many friendships that were born over a quarter of a century ago.

Calo neither manufactures nor recommends any type of remedy for pets, knowing that this field is well covered by trained Veterinary Specialists.

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Sincerely,

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The 2 familiar packages shown above are distributed to the nation by thousands of grocers and pet food stores, coast-to-coast. Calo is a quality product, as its carefully compounded formula will reveal. Calo aspires to be a product worthy of your consideration. Special literature is available upon request.

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Activated Animal Sterols, Fish Liver Oils, and Wheat Germ enrich this product with vitamins A-D and members of the B group

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DRY MATTER	• A MINIMUM 27%
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norden's

# PARACIDE CAPSULES



*for more effective treatment  
against roundworms, hookworms  
and tapeworms in dogs and cats!*

Norden's Paracide capsules prove unusually effective in the removal of important intestinal parasites in dogs and cats. They are also recommended for whipworms in cats. A liquid diet (milk preferred) should be given 24 hours before dosing. No follow-up laxative is necessary.



Size No. 2½—Dogs, cats, one capsule for each 2½ lb. body weight.

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Nebraska

# PHE-MER-NITE®

(Phenylmercuric Nitrate)

Phe-Mer-Nite provides dependable bactericidal and fungicidal activity, even in the presence of exudates and soap. In proper dilution it is nonirritant to tissue. These qualities make it an outstanding antiseptic for veterinary practice.

## AVAILABLE IN THE FOLLOWING FORMS--

- TINCTURE.....for preoperative skin sterilization
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- SUPPOSITORIES.....spermicidal for mismated females
- JELLY.....antiseptic lubricant for obstetrical work

*Ask your Massengill Representative about Phe-Mer-Nite or write to*

THE S. E. MASSENGILL COMPANY

*Veterinary Division*

Bristol, Tennessee



# all-purpose local ANESTHETIC



*faster acting—longer acting for . . .*

Epidural  
Infiltration  
Nerve block  
Topical

ANESTHESIA

CYCLAINE was introduced as a new anesthetic agent for epidural anesthesia in cattle. Its injection into the distal vertebral canal anesthetizes the nerve roots so that the pelvic organs, and to some extent the hind limbs, are deprived temporarily of sensation.

CYCLAINE has been found useful in dystocia, prolapse of the uterus, vagina and rectum, torsion of the uterus, retained placenta, and straining due to vulvitis or vaginitis.

Because of its pronounced anesthetic activity and safety, CYCLAINE may be employed also wherever local anesthesia is indicated—i.e.: infiltration, nerve block, and topical anesthesia in the eye.

*Dosage:* 5 cc. of Sterile Solution CYCLAINE hexylcaine hydrochloride 5% is generally satisfactory for epidural anesthesia in mature cattle.

For infiltration anesthesia, nerve block, and for topical anesthesia in the eye,

CYCLAINE (Veterinary) should be diluted to either a 1% or 2% solution with sterile water or physiological saline solution.

*Supplied:* No. 3104—20 cc. rubber capped vials containing 50 mg. of CYCLAINE hexylcaine hydrochloride per cc. (5%).

## Cyclaine®

VETERINARY Hexylcaine Hydrochloride



Sharp & Dohme, Veterinary Division  
Philadelphia 1, Pa.

# antibiotics news and notes

Current Developments in the Field  
of Veterinary Antibiotic Therapy

Prepared for veterinarians by the



Veterinary Department, Antibiotic Division  
Chas. Pfizer & Co., Inc., Brooklyn 6, N. Y.

Vol. 1, No. 2 September, 1952

## SHIPPING FEVER IN CATTLE

As winter progresses, a Connecticut veterinarian has found that cattle with shipping fever pneumonia respond less and less readily to sulfonamides, probably, he feels, because of treatment at the point of origin which resulted in the subsequent building up of sulfonamide-resistant organisms. Since treatment to with excellent results. and 1 Gm. on each of the "uneventful recovery"

## CHEMICAL STRUCTURE

of Terramycin

## *Did you get it??*

ANTIBIOTICS NEWS AND NOTES is Pfizer's most recent service to the veterinary profession.

Mailed monthly to all veterinarians in the U. S., it is an interesting and informative compilation of items from the modern literature on antibiotic therapy.

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Veterinary Department, Chas. Pfizer & Co., Inc., 630 Flushing Avenue, Brooklyn 6, N. Y.  
We will make sure that your name is on our mailing list.*

Chas. Pfizer & Co., Inc. is the world's largest producer of antibiotics. A large variety of veterinary dosage forms of Pfizer Terramycin, Penicillin, Streptomycin, Dihydrostreptomycin and Combiotic\* are available from ethical veterinary distributors.

\*TRADEMARK, CHAS. PFIZER & CO., INC.



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# speed tissue repair



in **wounds** (*especially slow healing*)

**burns • ulcers** (*external*)

**sore, cracked teats**

**otitis externa**

**postpartum perineal tears**

*with simple, safe, effective*



## DESITIN<sup>®</sup> OINTMENT

the pioneer external cod liver oil therapy



*it's the **cod liver oil** that  
makes the healing difference!*

Soothing, protective, healing . . . eases pain, itch,  
and irritation...eliminates necrotic debris...speeds  
smooth epithelization in impaired surface tissues.



**DESITIN Ointment** is a stable, non-irritant  
blend of crude Norwegian cod liver oil  
(with unsaturated fatty acids and vitamins A  
and D in proper ratio for maximum efficacy),  
zinc oxide, talcum, petrolatum and lanolin.  
Dressings easily applied and removed  
without disturbing granulation. Jars of 1 lb.;  
tubes of 1 oz., 2 oz., 4 oz.

- *write for professional  
samples and literature*

Veterinary Dept.

**DESITIN** CHEMICAL COMPANY  
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# ANTI-SWINE ERYSIPELAS SERUM AND DESICCATED VACCINE

## FROMM



PREFERRED  
BY PROGRESSIVE  
VETERINARIANS

● **EFFECTIVE PROTECTION** against *Erysipelothrix rhusiopathiae* infection is provided in Anti-swine Erysipelas Serum and Desiccated Vaccine FROMM. Because of uniform satisfactory results it is the "freeze dried" vaccine of choice of all progressive veterinarians.

FROMM pioneered the production of vaccines in dry form (freeze dried) in veterinary biologics. In making available Anti-swine Erysipelas Serum and the desiccated Vaccine, FROMM Laboratories continues its policy to supply the best in prevention and treatment of animal diseases to the veterinary profession.

● Vaccine supplied in 5 CC. and 15 CC. vials  
Serum supplied in 250 CC. vials

● Sold only to Qualified Graduate Veterinarians

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LABORATORIES,  
INC.

GRAFTON,  
WISCONSIN, U. S. A.

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# Attention California Veterinarians

*A new Comprehensive Liability Insurance Policy is available to you. This Package Policy provides the following coverages:*

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(Both business and personal)
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3. Animals in care, custody and control.
4. Products Liability.
5. Contractual Liability.
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*This coverage is written at competitive rates and in a domestic insurance company.*

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**COVERAGE,**

**RATES,**

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Los Angeles 4, California  
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**or**

**CHARLES S. TRAVERS, Executive Secretary**  
California State Veterinary Medical Association  
3004 16th Street • San Francisco, California



# Helping Myself.. ... and my Profession

When you buy from members of Associated Serum Producers (listed below) you help yourself and your profession in more ways than one. Because . . .

1. These companies sell to **VETERINARIANS ONLY**, never to unethical outlets.
2. They are sole underwriters of the public education campaign that is helping broaden your practice and build greater recognition for the profession.

Remember the names below. Orders placed with them are in hands that are helping you and all veterinarians.

Corn Belt Laboratories, Inc.  
The Corn States Serum Co.  
Fort Dodge Laboratories, Inc.  
Grain Belt Supply Co.  
The Gregory Laboratory, Inc.  
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Missouri Valley Serum Co.  
The National Laboratories Corp.

Norden Laboratories  
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Sioux Falls Serum Co.  
The Southwestern Serum Co.  
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● **ASSOCIATED SERUM PRODUCERS, INC.**

Sponsors of American Foundation for Animal Health





*full coverage in mastitis*



When laboratory identification of the causative organism in a case of mastitis is not conveniently at hand, neomycin sulfate offers full coverage against the pathogens commonly encountered: Streptococcus, Staphylococcus, coliforms, Pseudomonas.

## Teatube\*-Neomycin

another product of

**Upjohn**

**Research** for the veterinarian

Each convenient 3.5 Gm. applicator tube contains 500 mg. of neomycin sulfate in a special, nonirritating, milk-miscible base.

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DEPARTMENT OF VETERINARY MEDICINE

THE UPJOHN COMPANY, KALAMAZOO, MICHIGAN



**THE ADVANTAGES OF USING HAVOSEPT  
IN ROUTINE OBSTETRICAL OR EXPLORA-  
TORY CASES IN LARGE OR SMALL ANIMALS**

- ✓ *lasting germicidal properties*
- ✓ *pH adjusted to that of the skin*
- ✓ *foams in the hardest water*
- ✓ *provides a fine lubricating film*
- ✓ *no allergic reaction*
- ✓ *no salt film on instruments*

HAVOSEPT is a free-flowing antiseptic detergent with lubricating, deodorizing, and protectant properties for veterinary use. It is an amber-colored liquid that may be conveniently shaken on the wet arms and hands from the dispenser bottle. HAVOSEPT is absolutely non-irritating to the skin and does not cause "soap allergy" as it contains no soap. In experimental work HAVOSEPT has proven non-detrimental to rubber equipment.

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Effective medication for maintaining normal milk flow through the streak canal in cases of Injured Teats, Scab Teats, Obstructions and for keeping canal open in post-operative therapy.

Contain Sulfathiazole. The medication is in the Dilators and is released slowly to maintain a prolonged antiseptic level. Dr. Naylor Dilators furnish gentle, non-irritating support to mucosa of teat canal and promote normal relaxation at end of teat by sustained antiseptic contact directly at site of trouble.



Dr. Naylor Dilators are soft, absorbent surgical dressings impregnated with Sulfathiazole and Methyl Violet. Fit either large or small teats. Smooth, rounded tip for easy insertion.



**Dr. Naylor's**

### MEDICATED TEAT DILATORS

DOLLAR PACKAGE (Contains 45 Dilators)	\$8.00 per doz.
FIFTY CENT PACKAGE (Contains 16 Dilators)	4.00 per doz.
PLAIN DISPENSING PACKAGE (Contains 12 Dilators)	3.00 per doz. →

**H. W. NAYLOR CO., MORRIS, N.Y.**

# ...The Buy of the Year!



## THESE EXTRA FEATURES ASSURE EXTRA VALUE!

- Scratch-resistant top—61" x 22"
- Equipped with tie rods for quick, positive fastening of animals. Rods made of chrome-plated spring steel, adjustable ties of highly-polished aluminum.
- Top is free of sharp edges. Injury to animals is positively eliminated.
- Advantages of split or vertical top arrangement are combined with flat surface top.
- Operate with minimum strain on animal's stomach muscles while spaying.

## Ideal for Examination or Operating

### ... Well-Built to Last Years Longer

This amazingly low cost Van-Don "Special" Veterinarian's Table offers most of the features usually found only in de luxe models. Made of the finest materials, it fills every need of small animal hospitals and private establishments. Full-size top provides 1342 square inches of *acid-resisting* working surface—*easy to keep clean*.

Heavy, circular 20" *non-tip* cast iron base is drilled for permanent installation. Single pier construction with 5" column finished in triple-coated white enamel. Table top, 37" high, assures maximum convenience and ease of operation. *Table is fully guaranteed as to workmanship and materials.*

### AN UNBEATABLE VALUE—Don't Delay!

Standard Model (porcelain enamel top).....\$ 99.50  
De Luxe Model (stainless steel top).....\$139.50

(Prices subject to change without notice)

Bank references: First National Bank, Chicago

#### VAN-DON VETERINARY SUPPLY COMPANY

621 South Plymouth Court, Chicago 5, Ill.

Please ship by freight, f.o.b. Chicago, one Van-Don "Special" Veterinarian's Table, as indicated, on the terms checked below:

- ☐ Standard    ☐ De Luxe
- ☐ CASH remittance in full, less 5% for cash, is attached.
- ☐ C.O.D. 25% deposit, required on all C.O.D. orders, is attached.

Name.....

Street Address.....

City..... Zone..... State.....

# THE CALIFORNIA VETERINARIAN

## JANUARY-FEBRUARY, 1953

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### Number 3

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Unsolicited manuscripts are at sender's risk, and when received will not be returned unless accompanied by return postage. The Association is not responsible for views of contributors and we reserve the right to edit and condense articles. Advertising rates will be furnished upon request.

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## In Memoriam

### Oscar J. Kron



*Oscar J. Kron, the oldest practitioner in San Francisco (in point of years in practice), passed away December 17, 1952. Death was sudden.*

*Oscar, the son of a socially prominent family, was born September 1, 1884, in San Francisco. After attending the University of Santa Clara, he attended the New York American Veterinary College, where he received his DVS degree in 1907.*

*After serving a year as an assistant to Dr. H. K. Miller, one of the earliest exclusive small animal practitioners of New York, he returned to his native city and established the second, and certainly the most up to date, exclusively small animal hospital and practice there.*

*On November 27, 1932, he was joined in practice by Dr. George M. Simmons. The firm of Kron and Simmons existed until his death.*

*He joined the California VMA in 1909. He served that organization as vice-president and president. From 1948 until the time of his death he had been treasurer. He had served on the executive committee many times as well as on many other committees during his long membership.*

*In 1910 he became affiliated with the AVMA. He was a member of the Bay Counties VMA and the San Francisco County VMA, the San Francisco lodge of Masons, the California Scottish Rites Bodies and the Rotary Club.*

*He is survived by his wife, Ethel (nee Norden), whom he married in 1927.*

*One of the most beloved, colorful and popular personalities in the veterinary profession in California, Dr. Kron will be missed keenly by his host of friends and especially by his colleagues. A state or local gathering of veterinarians during the past forty years, without the presence of Dr. Kron, was an unusual occasion. This was likewise true concerning his fraternal affiliations. He enjoyed the friendship and company of his fellow men, who were legion.*



# Forty-ninth Annual Report of the State Board of Examiners In Veterinary Medicine, 1952

Department of Professional and Vocational Standards

## Letter of Transmittal

To His Excellency, Earl Warren  
Governor of the State of California  
Sacramento, California.

Your Excellency:

Conforming with the provisions of Section 4810 of the Business and Professions Code of the State of California, Gaylord K. Cooke, Secretary of the Board of Examiners in Veterinary Medicine for the State of California, has the honor of presenting for your consideration the forty-ninth annual report, showing the activities of this branch of the State Government for the year 1952.

Respectfully submitted,

GAYLORD K. COOKE,  
Secretary.

Berkeley, California,  
December 31st, 1952.

## Officers and Members of the Board

President, Dr. Eugene C. Jones, 5900 Bayshore Walk, Long Beach.

Vice-President, Dr. R. A. Ball, 1318 McHenry Ave., Modesto.

Secretary, Dr. Gaylord K. Cooke, care of Health Department, Berkeley.

Dr. Ernest C. Baxter, 816 So. San Pedro St., Los Angeles.

Dr. Ernest H. Houchin, 40 West Santa Clara Ave., Ventura.

James M. Sims, Jr., Investigator, care of Health Department, Berkeley.

## Meetings

During the year 1952 the Board of Examiners in Veterinary Medicine held the following meetings:

January 24, 25, 26 ..... San Francisco  
June 23, 24, 25 ..... Los Angeles

## Examination Statistics

Date	No. Participating	No. Passed	No. Failed
January 24, 25, 26	22	20	2
June 23, 24, 25	93	89	4

## San Francisco, January 24, 25, 26, 1952

Adams, Howard Marvin	Miner, Nathan
Caswell, Don Leroy	Moore, John Francis
Follett, Neil Verne	Noyan, Mehmet
Garcia, Jose G.	Rhode, Edward Albert, Jr.
Graham, John Edw. Blake	Sharkey, James Earl
Green, Earl Leavitt, Jr.	Stephens, Clayton
Harvey, Robert Oliver	Storg, Jacob
Hedler, Herbert Roland	Ucko, Peter Wolfgang
Likbe, Keith George	Von Tour, Robert
Madill, Kimball Ross	Weillington, Joseph Wm.
Mashek, Victor R.	White, Leroy Lawson

## Los Angeles, June 23, 24, 25, 1952

Andrews, Aaron LeGrand	Maude, Arthur Edward
Anthony, Delbert Owen	Maurer, Benjamin Paul
Azlen, Glenn Franklin	McGowan, Blaine, Jr.
Baker, Norman Fletcher	Meyers, Robert Bruce
Barsaleau, Richard Bernard	Milanovich, Ralph
Bevins, Noel Fulton	Miller, Michael D.
Boyd, Henry Purden	Miller, Rufus Arnold
Bryner, Clinton Reed	Morehouse, Lawrence Glen
Buddingh, Fred	O'Brien, John Conlan
Burger, Charles Harold	Parker, Harold Roosevelt
Campbell, Frank John, Jr.	Parker, Stewart Herman
Cobbie, Roy Jones	Peacock, Paul William
Cripe, Wyland "S"	Peart, Wendell Goodell
Davis, Allan Neal	Perkins, Alan George
Dawson, Francis Edward	Piper, Herbert Nelson
Dunsing, Joseph William	Plocher, Erwin Milton
Edick, Melvin	Plocher, Harold Daniel
Fink, Richard Bernard	Puterbaugh, George
Flinn, Charles Milton	Horton
Frier, Phillip Allison	Rediske, Raymond
Gersten, Eli	Richard
Gilhooley, David James	Richards, Berwyn
Gooch, Marshall Harry	Rottman, Warner L.
Grim, Alfred Christian	Saunders, Jack Francis
Harder, Curtis Norman	Savage, David Earl
Harris, Henry Charles	Schmidt, John Hugh
Hatcher, Malcolm Gordon	Schmutz, Milton David
Hill, Harry Harold, Jr.	Schumann, Alvin Marvin
Howard, John Ellis	Scott, Ralph Cleland
Hudson, Donald Dean	Shirley, John Burroughs
Hughes, Walter Franklin	Smart, William Cary
Humphrey, Millard Rodney	Stocking, Gordon Gary
Ingraham, Rodney Harold	Storms, Lester "C"
Irwin, Addison Lee	Temple, James Louis
Ivie, Harold Dee	Trevino, Gilberto
Johnson, Merle Kenneth	Stephenson
Kelly, Wilson Calvert	Turver, John Turton
Kinghorn, Ferrin B.	Twitchell, Marilyn June
Kleck, Jacob Emire	Vandervort, Glen Richard
Knoop, Francis William	Virgin, Joseph Oliver
Kohler, Jack Lewis	Waterman, Sidney Paul
Krell, Walter August	Watt, Donald Edward
Lamkin, William Gordon	Wattles, John Alexander
Lancaster, Howard Frank	Weaver, Adrian
Lewis, Wilson Burriss	Franklin, Jr.
Loeffler, Harry Adolph	Wegert, Warren Julius
Makino, Ernest Mineru	Weldon, Richard Cowling
Martinelli, Lido	White, Leroy Lawson
Mashek, Victor R.	

## Law Enforcement

During 1952 there were four convictions of unlicensed persons obtained by the Board. Forty-seven new complaints were received, fifty complaints investigated, eight warnings were issued and one license suspended.

All registrations and finances are handled through the Department of Professional & Vocational Standards in Sacramento.

Number of licensed veterinarians as of Dec. 31, 1952, 1233.

Number of licensed veterinarians in the Armed Forces, 52.

## Beware

There is a salesman going through the country selling rubber aprons. Several doctors have given him orders paying in advance, and the merchandise has not been delivered. If anyone knows of his whereabouts please contact the Secretary's office.

A daughter was born to Dr. Paul D. DeLay's wife.

Mrs. Herbert I. Ott presented her husband with a son.



**CUTTER** Laboratories



**Proudly Announces Another Great FIRST  
IN HOG CHOLERA Immunizing Agents!**

# Viraccine\*

**The FIRST Virus Vaccine of any kind commercially  
propagated in TISSUE CULTURE in the United States!**

Viraccine is the result of six years of specific basic research. Viraccine has been critically field-tested by practicing veterinarians operating independently and exercising full control over herd selection under actual field conditions.

## Viraccine is different

The virus is propagated *in vitro* in bacteriologically sterile tissue culture. Animal passage plays no part in the modification of the virulence or routine cultivation of Viraccine.

Viraccine is the latest accomplishment of Cutter's quarter of a century basic hog cholera research—a program which has yielded for the veterinary profession such outstanding developments as Boynton's Tissue Vaccine (B.T.V.) and the first commercial production of Crystal Violet Vaccine.

### ON REVERSE SIDE

A direction sheet has been reproduced on the back of this announcement so that you may become completely familiar with Viraccine usage.

Order Viraccine from your Cutter Distributor  
in 5, 25 and 50 Dose packages,  
complete with diluent.

Available to the Veterinary Profession Only

CUTTER LABORATORIES

Berkeley, California • Chicago, Illinois



TISSUE CULTURED

## Viraccine

Hog Cholera Vaccine

\*TM



## Viracine DIRECTIONS

### DESCRIPTION

Viracine is a live modified virus vaccine for immunization of healthy swine against hog cholera. The virus used in the preparation of the Viracine is routinely propagated and was modified in virulence by serial passage by Dr. W. H. Boynton's bacteriologically sterile tissue culture method. Viracine must be restored to a liquid state immediately before use and anti-hog-cholera serum should be administered simultaneously with the Viracine injection. Pigs properly vaccinated with Viracine and serum do not transmit hog cholera to susceptible animals in contact with them.

### PREPARATION FOR USE

Viracine must be restored to a liquid by adding the accompanying diluent immediately before use. Withdraw approximately 5 cc. of the accompanying diluent through the stopper using a sterile syringe and needle. Inject that amount of diluent through the stopper of the dried vaccine container. Agitate until completely dissolved. With the same syringe and needle then withdraw all of the reconstituted vaccine from the vaccine container. Insert the needle through the stopper of the diluent bottle and inject that dissolved vaccine into the larger volume of diluent. Agitate and use immediately after mixing. (Note: There is an ample supply of dried virus available in the vaccine container to treat the number of pigs provided for in each package; so even though there may be a minute amount of dissolved virus that cannot be removed from the vaccine container, the vaccine if diluted according to directions will provide ample virus for each pig injected.) CAUTION: Be sure that needles and syringes used to dilute the vaccine have been sterilized by boiling. Chemically sterilized syringes should not be used because they are apt to kill the virus and render the vaccine ineffective.

### DOSAGE OF VIRACINE

The diluted vaccine is administered in 2 cc. doses intramuscularly. The dosage of Viracine is the same regardless of size or age. We recommend the injection be made in the ham.

### DOSAGE OF SERUM

Normal Farm Vaccination: For vaccination of healthy unexposed swine, we recommend the injection of anti-hog-cholera serum at the same time the pigs are vaccinated with Viracine. The table below indicates the amount of serum that may be used for safe vaccination of swine under these conditions; the dose of serum being varied with the weight of the pig.

Up to 100 pounds .	10 cc.
100 - 150 pounds .	15 cc.
Over 150 pounds .	20 cc.

Pigs vaccinated under these conditions will be fully protected against hog cholera exposure within seven days after vaccination.

Claims have been made for immediate passive immunity following administration of 15 cc. doses of anti-hog-cholera serum administered simultaneously with modified virus. We feel that immediate passive protection cannot be routinely expected

from such low serum doses when used in subnormal pigs often encountered under variable field conditions. Therefore, where immediate immunity appears to be required, the full prophylactic doses of anti-hog-cholera serum should be administered with Viracine.

For vaccination of swine which are to move through sale barns, or purchased from sale barns, or which are to be put on garbage feed, or any other condition where exposure to hog cholera may occur near vaccination time, at least 15 cc. of anti-hog-cholera serum should be given at the same time pigs are injected with Viracine. The dose of serum, however, as pointed out above, should be increased in proportion to weight and condition of the pigs under these conditions and the safest procedure would be to administer a full prophylactic dose of anti-hog-cholera serum.

### DURATION OF IMMUNITY

Extensive field trials in California and Iowa have indicated that pigs vaccinated and retained on the farm after vaccination and then challenged by injection of 2 cc. of virulent hog cholera virus at intervals of from 2 to 7½ months are solidly immune to hog cholera as a result of Viracine and serum immunization.

It has been shown in well controlled but less extensive experiments that pigs vaccinated with Viracine and serum withstood a challenge injection of virulent hog cholera virus one year after vaccination. In this experiment susceptible control pigs ranged in constant contact with the vaccinated group from the day of vaccination until the vaccinated pigs were challenged. These susceptible contact pigs were also challenged when the vaccinates were injected one year after the start of the experiment. They were found to be completely susceptible to hog cholera as they developed typical hog cholera symptoms following injection of the virulent virus. This experiment justifies the following conclusions:

1. The immunity apparent in the vaccinated animals one year following vaccination could not have been bolstered by exposure to hog cholera in the intervening one year between vaccination and challenge, but is immunity retained from the initial vaccination.
2. Virus was not spread from the vaccinated pigs to the susceptible contact pigs following vaccination with Viracine and serum.

### PRECAUTIONS

1. Syringes used for both dilution and injection should be sterilized by boiling in water.
2. Clothing and other equipment contaminated with virulent hog cholera virus should not be used when vaccinating hogs with Viracine.
3. Pigs should be at least 6 weeks old before injection with Viracine.
4. Serum should be used simultaneously in the dosage recommended for the weight.
5. Only healthy, unexposed pigs should be vaccinated.
6. Use immediately after dilution.

# Use of Progesterone in Preparturient Prolapse of the Vagina

GEORGE R. BURCH,\* D.V.M., *New Augusta, Indiana*

## A Preliminary Report

Preparturient prolapse of the vagina is commonly observed in both beef and dairy cattle, occasionally in sheep and pigs. The cause of this condition is not understood, and therapy has been purely symptomatic. Recently, data have been presented which indicate this condition may be due to excessive estrogen stimulation, since implants of diethylstilbestrol have caused vaginal prolapse in heifers and gilts.<sup>1,2</sup> The use of progesterone has been suggested to abolish the estrogenic activity noted in cystic ovaries of the bovine.<sup>3,4</sup> The hormone has also been used successfully to abolish symptoms of false pregnancy in the bitch.<sup>5</sup>

A clinical research study using progesterone in cases of preparturient prolapse of the vagina was conducted following the development of a new hormone preparation, Repositol.\*\* Repositols are special solutions of steroid sex hormones that are injected intramuscularly to produce an implant. Twelve veterinarians in seven states kindly participated in this study, and through their efforts the results presented in Chart No. 1 were obtained.

## Results

CHART NO. 1

Results Obtained in Preparturient Prolapse of the Vagina With Repositol Progesterone

No. of Cases	Type of Case	Dose	Satisfactory (Straining Suppressed)		Unsatisfactory (Straining not Suppressed)	
3	Porcine	50 mg.	2	1		
5	Bovine	125 mg.	0	5		
12	Bovine	150 mg.	4	8		
1	Ovine	150 mg.	1	0		
8	Bovine	200 mg.	7	1		
56	Bovine	250 mg.	48	8		
9	Bovine	500 mg.	8	1		
			70	24		

Since precise information as to dosage was lacking, varying amounts of the hormone were used. As indicated in the chart, a dose of less than 200 mg. of the hormone in the bovine is of questionable value. However, injections

varying from 200 to 500 mg. were apparently of distinct assistance in alleviating the straining. The response was especially gratifying in those cases of early prolapse. Based on the weight and severity of the case, it appears that a dosage of 1 mg. of Repositol progesterone for 5 lbs. body weight for mild cases and 1 mg. per 2 lbs. body weight for severe cases can be useful in treating preparturient prolapse of the vagina.

## Discussion

The salient point of this study was to attempt to determine if an injection of progesterone would abolish the persistent straining observed in preparturient prolapse of the vagina. Having had considerable previous experience with this type of case, the veterinarians conducting this study were well qualified to offer comments concerning this hormone therapy. The following impressions were gained by this study:

1. The cessation of straining following the injection usually occurs between the 24th and 48th hour. Persistency of the straining past the 48th post-injection hour may be an indication of inadequate dosage. In general, response was more rapid in prolapses of short duration.

2. In those animals that show prolapse several weeks before the expected parturition date, repeated injections may be required.

3. In the bovine, doses smaller than 200 mg. should not be used. The amount of hormone injected is regulated by the severity of the case. Partial prolapse with little or no straining can be treated with smaller amounts of the hormone than can those cases of complete prolapse showing severe straining.

4. Mild cases with no straining, required only hormone therapy.

In one series of five cows with severe prolapse varying from 24 hours to one week in duration, an injection of 500 mg. of the hormone was used (reported in Chart 1). All animals ceased to strain 24 to 48 hours after the injection and calved normally.

The following routine of treatment for severe prolapse cases is suggested:

- a. Epidural anesthesia.
- b. Thorough cleansing of the prolapsed organ.
- c. Manual replacement.
- d. Retention sutures in the lip of the vulva.
- e. Injection of Repositol progesterone.
- f. If straining is abolished in 24 to 48 hours, sutures are removed. If straining persists

(Continued on Page 31)

\*Research Farm, Pitman-Moore Company.

\*\*Trademark, Pitman-Moore Company, Indianapolis, Indiana.

<sup>1</sup>Clegg, M.T., Cole, H.H., and Guildert, H.R.: Effects of Stilbestrol on Beef Heifers and Steers; *Journal of Animal Science*, Nov., 1951, p. 1074.

<sup>2</sup>Robertson, G.L., Casida, F.E., Grummer, R.H., and Chapman, A.B.: Some Feeding and Management Factors Affecting Age at Puberty and Related Phenomena in Chester White and Poland China Gilts; *Journal of Animal Science*, Nov., 1951, p. 481.

<sup>3</sup>Branker, W.M.: Practicing Veterinary Surgeons Review of Lutenizing Hormones, *Veterinary Record*, Feb. 2, 1952, p. 61.

<sup>4</sup>Hansel, William, and Trimberger, G. W.: Effect of Progesterone on Ovulation Time in Dairy Heifers, *Journal of Dairy Science*, Jan., 1952, p. 65.

<sup>5</sup>Phillips, Lee R., and Burkhardt, B.S.: Personal Communication.

# Report of the California State Veterinarian

January 26, 27 and 28, 1953, at the University of California, Davis

The January meeting of the CSVMA was another smash hit. Although the program, as is all too usual, was changed every few days and ended up showing slight resemblance to the published forecast, the result was decidedly satisfactory.

Attendance may have been at an all-time high, as the registration was almost 350, and the number who did not register, preferring to let the rest of us pay their share of the bill, seemed higher than ever. Everybody seemed to have a good time, and there were more corridor and hotel-room discussions of information gained than is usual. The students, an alert group of whom California has reason to be proud, were on hand as guides and general assistants, and we are pleased to announce that almost all of the following report on papers given Monday and Tuesday, as well as coverage of the Monday morning talks and demonstrations, is a contribution of the Junior Chapter of the AVMA at Davis.

## Monday Morning

**Demonstrations.** For the convenience of the members attending the conference, the Faculty of the School of Veterinary Medicine presented demonstrations and informal discussions on selected subjects. These related to pathology, public health, clinical pathology, parasitology, biochemistry, anatomy, radiology, microbiology, and pharmacology.

Dr. A. L. Black of the Biochemistry Department demonstrated paper chromatography as a new tool for medical research. He discussed the application of this technic in human medicine, where it has been used for determining susceptibility to certain types of cancer; alcoholism; obesity; and several other disorders. The possibility of applying this method to problems in the field of veterinary medicine is being investigated. The mechanics are relatively easy to acquire, and the possibility of obtaining a rapid diagnosis of metabolic disorders looks promising.

Dr. T. J. Hage of the Radiology Department exhibited some of the best veterinary radiographs available to the profession. Included in his collection, and available for study during the conference, were such interesting radiographs as traumatic pericarditis and traumatic gastritis in the cow, hydrothorax in the horse, and numerous pneumonias and osteoarthropathies in the dog.

A display on erysipelas and listeriosis was presented by Dr. J. W. Osebold of the Division of Microbiology. The cultural and morphological similarities between *Listeria monocytogenes* and *Erysipelothrix rhusiopathiae* were noted. Brain lesions arising from

listeria infection were demonstrated, and the whole problem of the viral and bacterial encephalitides was the subject of lively discussion.

Exhibits of methods used in diagnosing parasitic conditions were shown. These included the Stoll egg counting equipment; the Boermann apparatus which is used for isolation of larval nematodes; and graded screens for separation of nematodes from intestinal contents.

Microscopes were set up which demonstrated the relative efficiency of the three common methods of fecal examination: the direct smear, sedimentation, and flotation. Gross specimens of some of the more common and troublesome parasites of California were shown. This included both endo- and ectoparasites, and the parasites in tissues as well as isolated. Photomicrographs of the more common nematode ova found in feces were on hand with a viewer, to allow the practitioner to refresh his memory.

The Anatomy Department, under the guidance of Dr. L. M. Julian, exhibited dwarfism in the Hereford; anatomical stamps as an aid in recording case histories; and apparatus for demonstrating neuroanatomy.

Tours were conducted through the Beagle colony which is being established with the cooperation of the Atomic Energy Commission. The colony, which includes over two hundred pedigreed Beagles, covers an area slightly under four acres. Of greatest interest is the new method of construction of kennels and runs, which facilitates the care and management of the dogs. Respiratory diseases are unknown. A visit to this colony will be worth any practitioner's time.

Dr. L. W. Holm of the Pharmacology Division conducted a demonstration and led an informal discussion on the recent developments in treatment of acute and chronic lead poisoning in cattle and horses.

Dr. J. Moulton of the Pathology Department had microscopes set up to demonstrate some of the more important fungus diseases: coccidioidomycosis, histoplasmosis, blastomycosis, actinomycosis, and epizootic lymphangitis. In addition, the inclusion bodies of rabies, distemper, and canine infectious hepatitis were shown. A section taken from the second case of toxoplasmosis to be found in a California dog was on view.

*Coxiella burnetii*, the cause of Q fever, was demonstrated intracellularly in impression smears of guinea pig spleen and the yolk sac of 12-day avian embryos. Four microscopes were set up with typical slides from the experimental files. This organism is cultivated



# Medical Association Winter Conference

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in eggs and used in the Q fever pasteurization studies being conducted by the Department of Veterinary Public Health of the School, with the cooperation of the U. S. Public Health Service.

Dr. Schalm's exhibit on clinical pathology dealt primarily with subjects pertaining to the mastitis complex, and was designed to coordinate the efforts of clinical pathological research workers, the veterinarian in the field, and the farmer, for better and more economical results in the treatment of mastitis in dairy cows.

Streak plates on tryptose agar and Edward's medium demonstrated differential characteristics, where existing, of corynebacteria, *Streptococcus uberis*, *Str. zooepidemicus*, and *Str. agalactiae*; *Staphylococcus pyogenes*; *Aerobacter aerogenes*, and the colon bacillus.

The significance and practical implications of the use of the Hotis test were demonstrated by a review of field results, equipment, literature, and a pictorial exhibit. Anatomical and histological photographs and photomicrographs were displayed, showing the udder in disease, lactation, and involution. Photomicrographs demonstrating the embryogenesis of the mammary gland were designed to show clearly this extremely interesting phenomenon.

Finally, graphic results showed the studies conducted on two dairy herds for comparison of therapy and control of staphylococcus mastitis. There was an apparent inverse relationship of staphylococci and coliform organisms in the pathologic flora of the udder.

The exhibit pertaining to veterinary hematology demonstrated the use, significance, and clinical interpretation of the hematocrit, as well as the necessary equipment for performing the test.

Microscopic demonstration of *Dirofilaria immitis*, *Anaplasma marginale*, and canine lymphocytic leukemia were on display, as well as comparative blood pictures of a normal dog and a dog with pyometra.

Dr. W. W. Putney of Van Nuys demonstrated ear cropping. A dry-writing ball-point pen or indelible pencil is used to trace the proposed line of incision, which is made freehand in an essentially straight line. Serrated scissors facilitate secondary trimming if necessary. Hemorrhage may be controlled with high-frequency current. A continuous suture with 34 to 36 gauge stainless steel wire is placed through the skin only, from the tip of the ear to the base, and is removed in six or seven days. The base of the ear is closed by interrupted sutures, including the cartilage. These are removed in ten to fourteen days. Bandaging and immobilization of

the ears is done the day following surgery. Dr. Putney prefers to operate when the puppies are nine to ten weeks old. The operation was discussed further during the round table discussion on Tuesday afternoon.

Dr. Putney also demonstrated the use of local anesthesia in feline castration, injecting the local anesthetic directly into the spermatic cord as in human vasectomy. The hair is pulled from the posterior portion of the scrotum, and an elliptical incision is then made with scissors. The spermatic cord and its investing tunic are grasped with hemostatic forceps, and with steady traction the cord and testicle are removed.

Dr. Charles Reid conducted a demonstration of medial patellar desmotomy in the stifled horse. Dr. Reid first presented the symptomatology of the condition, emphasizing that a horse could not be backed with the stifle joint and leg in an extended position behind the animal, and the foot flexed. He suggested that an overextension of the stifle joint resulted in a mechanical femoro-tibial fixation. He believes the cause to be a medial patellar ligament shorter than normal in relation to the middle and lateral patellar ligaments; the shortness of the medial ligament accounting for the over-extension and fixation of the articulation. Abduction of the leg is necessary to relieve the tension on the medial patellar ligament and thus allow the joint fixation to be overcome. Often the horse accomplishes this feat itself.

Surgical relief is accomplished by means of a medial patellar desmotomy. Dr. Reid demonstrated the procedure on a live, standing horse. He used procaine for anesthesia, first infiltrating the medial area of the medial patellar ligament and then the area lateral to the ligament. A small skin incision was made at the lateral border of the ligament as close as possible to its insertion on the tibia. A small, straight bistoury was inserted through the incision and passed back to the medial edge of the ligament with the flat side of the blade against the ligament. The scalpel was then turned so that the cutting edge was in contact with the ligament, and the ligament was divided without further cutting of the skin. The wound was not sutured, but treated as an open wound. Dr. Reid stressed the importance of maintaining the joint in an extended position, and in keeping some of the animal's weight on the leg.

Dr. J. D. Wheat of the school clinic staff demonstrated the use of the para-vertebral lumbar nerve block in the routine rumenotomy of the bovine.

Dr. E. A. Rhode, also of the clinic staff, had

prepared for display a bovine cadaver demonstrating the positioning of hypodermic needles for placing an anesthetic to obtain the optimum anesthesia. Sites chosen for demonstration were: (1) the epidural space; (2) the para-vertebral lumbar nerve; (3) the cornual nerve and, (4) the oculomotor nerve as it emerges from the foramen orbito-rotundum in the cow.

### Monday Afternoon General Session

After a brief invocation by Rev. H. B. Smith, Provost Freeborn welcomed the California veterinarians to Davis, and discussed the high standards set for our veterinary students, and the objectives of the school, which are the betterment of human and animal health as well as the training of young veterinarians. President Inman responded, and after a few announcements the first speakers presented their papers.

**Viruses and Stunting.** Dr. James A. Baker of Cornell explained that viruses can cause stunting, and that vaccination of weanlings may result in a dangerous number of carriers. He gave two attenuated hog cholera viruses to young pigs, and found that they were still present after eight weeks in most animals less than three months old. They disappeared in less than three weeks in older pigs. The more virulent of the viruses seemed to persist longer, and all of the carrier pigs were stunted. Another disturbing finding was that these viruses, although attenuated by rabbit passage to non-lethal strength, were so virulent when recovered that 1 cc. could kill 100,000 pigs. He suggests that many of the stunted pigs (and calves and dogs) on our farms are virus carriers.

**Equine Infectious Anemia.** Dr. C. D. Stein of the BAI, one of the major speakers in the opening day general session, presented a scholarly paper on equine infectious anemia. He thoroughly covered the disease, the facts presented here being but a few of the important points he made.

The disease is world wide, has been diagnosed in 40 states and in 20 states since 1941, the most recent of which was an acute outbreak in New England tracks in 1947 where some 76 horses died or were destroyed before quarantine was lifted. The positive diagnosis is made only by horse inoculation, and anemia may be a poor diagnostic symptom since it may not be prominent and only develops as the disease progresses. The post mortem histopathological lesions are quite significant. There is swelling and proliferation of the R.E.S. cells in the liver, accompanied by round cell nodular formation in the liver lobules and hepatic hemosiderosis. Only two other equine diseases, trypanosomiasis and pyroplasmosis, present this picture and neither of these dis-

eases exists, as far as is known, in the United States today.

While the causative agent is presumed to be a virus, the elusive organism has never been isolated. The disease, however, can be transmitted experimentally from infected to susceptible animals by whole blood inoculations which is the basis for the diagnostic test. Other experimental evidence demonstrates that: (1) only minute doses of blood or body secretions are necessary for transmission; (2) infected mares transmit to offspring in utero; (3) the disease causes abortion; (4) external parasites, flies, lice and mosquitoes are common means of transmission; (5) there is a slow spread through intimate contact, and (6) carriers are the common source of the disease perpetuation.

Dr. Stein advocated a nine-point control program: (1) insect control; (2) prevention of transmission by contaminated instruments, e.g., needles; (3) avoidance of interchanging tack between horses; (4) making sure blood donors are free of the disease; (5) all antisera of equine origin be heated at 58°C for 1 hour to destroy the assumed virus (required by law); (6) carrier mares and stallions should not be used for breeding since the virus is transmitted in utero; (7) isolation or destruction of all known cases or carriers; (8) quarantine of new horses before admission into herd; (9) strict sanitation of all places of horse assemblies such as tracts and stables.

**Danish Veterinarians.** Dr. O. W. Schalm of the School of Veterinary Medicine, Davis, presented an interesting discussion on "Veterinary activities in Denmark." Dr. Schalm was invited to Denmark last year to advise the Danish government on a national mastitis program. He pointed out that since 60% of the income from exports is derived from animal products, a majority of which is purchased by Great Britain, the livestock industry has been developed to satisfy the butter, cheese, bacon, and egg requirements of the latter nation. The larger cooperatives of Denmark have been instrumental in obtaining government disease control programs. In addition to the mastitis program, tuberculosis and brucellosis control programs are in effect and have proven to be very successful. Many veterinarians in Denmark are employed in government work. Private practitioners participate in other work such as the meat and milk inspection programs. Colored slides were shown illustrating some of the methods used in agriculture in Denmark.

**Canine Viruses.** Dr. Victor J. Cabasso of Lederle gave a short description of the clinical symptoms of distemper, its epidemiology, its propagation, and its cause, followed by a discussion of the various prophylactic methods of the past and present. The egg-propagated live virus was recommended as the most effective vaccine but not as a therapeutic agent.



It protects against distemper but will not alter the course of the disease. Hardpad disease was shown to be due to the same virus as distemper, with variation of symptoms due to certain conditions in the host. Localization in the brain can be caused experimentally by giving sublethal doses of sulfaguanidine or intestinal contents from dogs with gastroenteritis. Infectious hepatitis was also discussed, and the new egg-adapted rabies virus.

**Business Meeting.** A welcome innovation was the scheduling of the business meeting on Monday afternoon. The evening was left free for social activities, which are a most important part of any conference.

The meeting was brief, and the most important items were the election of Nelson Crow to honorary membership in the association, and the favorable progress report of Dr. Arburua of the Equitable Compensation Committee. It was recommended that the veterinary building be named "Haring Hall," a move supported by the faculty as well as the association.

## **Tuesday**

### **Small Animal Session**

**Practical Laboratory Procedures.** The importance of laboratory tests as an aid to diagnosis was emphasized by Dr. Barr of Fresno. With general public acceptance of these procedures, the veterinarian should never hesitate to apply tests where indicated. Most clients are happy to provide fecal or urine samples. The various qualitative urine tests were discussed, and microscopic examination was stressed. Familiarity with the appearance of normal blood in the hemocytometer will permit estimates of tendencies to high or low values. Similarly, study of the chambers with the high power objective may give an idea of the differential count. The presence of microfilaria may often be detected in wet blood smears. Dr. Barr stressed the point that many cases of heart worm are missed because the veterinarian fails to apply this simple test.

**Infectious Hepatitis.** Dr. Baker briefly reviewed the literature, and showed slides comparing the temperature curves of distemper and hepatitis, and the leukocytic response. He presented experimental data on incubation time, mortality, and vaccination against the two diseases. He advised that pups be vaccinated at the age of three months with a combination of avianized distemper virus and inactivated hepatitis vaccine at one site, and a combination of the antisera at another site. They will then be permanently protected against distemper, and will be safe for six months from hepatitis. They should be re-vaccinated against hepatitis every six months, if they have not been exposed to it.

**Tissue Lysate.** Dr. W. S. Livingstone of North Hollywood spoke concerning a tissue lysate. He demonstrated with slides of affected animals and biopsy reports relatively good success with an antiquated method in bringing about regression of certain types of tumors occurring on dogs.

**ACTH and Cortisones.** Peter H. Forsham, M.D., director of the new metabolic unit at U. C. Hospital for research in arthritis and related diseases, reported that after the initial overenthusiasms about AVTH and the cortisones, and the subsequent inevitable disillusionment, the products are now finding their true place as very useful therapeutic aids. New products using them as a basis vary in potency, solubility, and rapidity of absorption; hydrocortisone may be combined with antibiotics for local treatment. Contraindications are tuberculosis, syphilis, or other diseases which are held in check by inflammatory processes, since cortisone inhibits inflammation. ACTH stimulates the production of cortisone. Prolonged treatment causes fluid retention, and potassium chloride (2 to 5 Gm./day) is given if therapy continues more than ten days; neutrophilia may be expected. Treatment suspended prior to surgery would mean death during surgery. Continuous cortisone treatment until several days after surgery may insure successful surgery in old, debilitated patients; 100 to 200 mg. are given four hours before surgery, and 100 mg. in divided doses for five days after, dosage is then decreased to zero by the tenth day. Longer therapy inhibits healing. ACTH is given 20 u. intravenously two hours before operating, and every six hours afterward. ACTH and the cortisones do not cure diseases, but prevent their manifestations; they therefore mask symptoms. In arthritic conditions they check inflammation thus preventing ankylosis of the joint.

**Surgery Roundtable.** Dr. McClave of Reseda demonstrated, with a mockup, the repair of chronic coxofemoral luxations in dogs by building up the eroded acetabular rim with lucite. The skin is incised and reflected from the wing of the ilium down over the trochanter, and entrance between the muscles is made by blunt dissection; with care not to damage the sciatic nerve. When a broken joint capsule must be removed from the acetabulum, a ventral approach is more suitable. Lucite is cheap, easily molded with heat, and causes no foreign-body reaction.

Dr. Putney of Van Nuys discussed ear cropping using 34-36 gage stainless steel for suturing the ear skin and insertion of stiff cartilage in the ear to correct a drooping condition. His use of 24-26 gage piano wire for a rack is another method of taping the ears up for the first week after cropping.

Dr. I. R. Roberts of Oakland presented his use of tantalum gauze in the correction of

ferent sites. If mixed in a vial first, there will be neutralization.

What do you call the disease seen in young pups that looks like distemper? *Dr. Baker:* When they show typical convulsions of distemper I would assume the distemper virus to be present. When pups are given distemper virus they do not show the classical signs. They develop encephalitis without any previous history of illness. Champing fits are commonest. This can also be caused by infectious hepatitis.

When should we expect a febrile reaction following distemper vaccination, and how severe should it be? *Dr. Cabasso:* If there is a reaction it will not be higher than 103.5, and seldom will last more than one day. It will occur three to four days after the vaccination.

Would there be enough viral residue on a syringe to spread the virus? *Dr. Cabasso:* If the syringe is thoroughly washed and boiled, there is no danger.

Why is the avianized vaccine given subcutaneously? *Dr. Cabasso:* We recommend the subcutaneous site because there is no danger of injury to the animal, it is simpler, and there is no difference in the speed of action.

What explanation can you give for the development of typical distemper two or three months after vaccination with avianized vaccine? *Dr. Cabasso:* The particular dose may have been inactivated in some way, as by overheating, or there may have been a very long incubation period. We do not know very much about the evolution of the encephalitic syndrome. If a dog is properly vaccinated, it will be immune.

Why is avianized vaccine not shipped to the veterinarian under refrigeration? *Dr. Cabasso:* I have no knowledge of distribution methods, it being outside my department.

What is the effect of heat on avianized vaccine, is it readily destroyed? *Dr. Cabasso:* Before vaccine is released, it must pass certain tests. It is dried, and samples are incubated at 37 C. for two weeks; this will not injure the vaccine. Unfortunately, under natural conditions the heat is not controlled, and we have no data on effects of higher temperatures.

What is the reaction of avianized vaccine to cold-sterilized syringes? *Dr. Cabasso:* Do not use any syringe contaminated with antiseptics. If these must be used, then the syringe should be flushed before use with sterile distilled water.

Have you found any correlation of hardpad disease with either distemper or infectious hepatitis? *Dr. Baker:* The closest correlations have been connected with infectious hepatitis. Pads of some of these dogs swell and seem inflamed, there is edema and some sloughing, and they get hard. I have seen no hard pads in distemper.

Have you seen chorea with hepatitis? *Dr. Baker:* We don't know the cause of chorea; you will not find virus in the brain or even lesions. It is "general knowledge" that chorea is a sequel to distemper; but both distemper and hepatitis are so widespread that we can not be sure. I have seen chorea in dogs recovered from hepatitis, with no exposure to distemper. We are now working on a new virus with some nervous manifestations.

Would it be advisable to vaccinate dogs with serum and with virus from a patient? *Dr. Baker:* It is being done. However, it is risky because there may be some other virus present in the patient. The advantage of a commercial vaccine is that it presumably has been tested and there is therefore no other virus present.

Do you believe there is any relation between the intestinal damage of hepatitis, and the penetration of the virus into the central nervous system? *Dr. Baker:* Verlinde postulated that the distemper virus would not by itself enter the central nervous system; intestinal products were required. This has not been proved, but some factor is needed for the virus to reach the central nervous system. It is possible that

the hepatitis virus damages the lining of the blood vessels, and this would be a simple, mechanical explanation.

What is the minimum amount of antiserum that could be given per pound for protection? *Dr. Baker:* The smallest efficient dose was 0.1 cc., and 0.125 cc. gave complete protection the same day. This was convalescent serum, not the hyperimmune commercial product. We have tried the commercial sera, and found them very effective, but have not used less than 5 cc. per pound.

What is the incidence of hepatitis in distemper-recovered dogs? *Dr. Baker:* Such a study could never be very accurate, and a very good answer will probably not be found.

Can hepatitis virus be grown in the chick embryo? *Dr. Baker:* I have tried by every conceivable method without success; I believe Dr. Cabasso has also been unsuccessful. *Dr. Cabasso:* There have been two reports of success, one from France and one from England. The one in France does not bear scrutiny because they were working in ferrets and may have had an admixture with distemper. In England, after 13 passages they were able to infect one dog out of two but the data are inadequate. *Dr. Baker:* I asked for some, but there is no more.

Reports have indicated that hepatitis exists in the cat as a latent infection. Is this true? *Dr. Baker:* The inclusion bodies of panleukopenia are indistinguishable from those of infectious hepatitis. This may be a source of confusion.



NELSON CROW, newly elected honorary member of the CSVMA, also served as guest speaker at banquet.

## Tuesday Evening

**Banquet.** The banquet began on time, as is happily our custom nowadays, and was held in Hughes Hall, the beautiful new dormitory a few blocks north of the veterinary building. The food was good. Most of the huge crowd in attendance seemed quite satisfied. We had a fine avocado salad with shrimp, followed by ham smothered in pineapple and maraschino cherries, with sweet potatoes, and ice cream for dessert with plenty of coffee. The service was good. The guest speaker was Nelson Crow, who is an excellent speaker. He

mentioned the figures to be found in the February *Nation's Business* (page 10) showing the present agricultural-economic outlook of the nation, adding some thoughtful and amusing comments. He had many anecdotes, well told, with which he interlarded his broad-range talk. Dr. Hart was our experienced master of ceremonies, and spared us the ordeal of introducing those at the speaker's table, who needed no introduction and were equally pleased with the innovation. The party broke up about ten.

### Wednesday General Session

**State Activities.** Dr. Carr had prepared a series of color films dealing with high points of the disease-control efforts of his staff. These were brief and most interesting, each accompanied by a commentary by a staff member.

Dr. Rosenberger led off with a discussion of scab. Cattle with bad crusts are soaked for two to five minutes, then brushed. They must be dipped at least four times, and the dip is tested several times daily. The dipping has more practical than medical difficulties.

Dr. Worcester discussed dourine, with its slow depigmentation of spots on the skin, and paralysis of the lower lip. Posterior paralysis also occurs, and plaques on the cinch area or around the neck. Most affected horses came from Mexico or had contact with Mexican horses; 35,000 blood samples were drawn in San Diego County and shipped to Washington.

"Chewing disease" described by Dr. Allen causes paralysis of the tongue so that animals can take no food or water; edema of muzzle and face follows. Hand-fed animals can survive, but do not completely recover. The cause is unknown, but star thistle may be implicated.

Mad itch begins with switching of the tail, followed after a few hours with licking, then rubbing of the perineal area until the cow is torn. The rubbing never stops, but Dr. Bonnicksen said there was apparently no sensation in the area.

An outbreak of ringworm in which some animals had lesions all over was described by Dr. Duckworth. Dipping was followed by recovery.

Acute listeriosis involving 14,000 sheep on 11 ranches and lasting 30 days showed the characteristic circling and running motions. Treatment was not too successful, but penicillin seemed to help.

Bluetongue, with its nasal discharge, torticollis, and inflammation of the coronary band, was excellently presented, and described by Dr. Schultz. A spray with DDT and BHC to repel flies for 30 days will stop an outbreak.

Vesicular exanthema is now so common in stockyards, holding pens, and garbage-feeding

establishments that people tend to ignore it. Recent outbreaks in Omaha were not diagnosed until swine reached California; calves must be inoculated for differentiation from foot and mouth disease. Garbage feeders do not wish to cook garbage, and 70 per cent of California hogs are garbage fed. A national movement may control garbage processing.

The only case of vesicular stomatitis ever reported in California was shown; it was the New Jersey type. Dr. McCollister inoculated two old mules without success, but horses showed extensive lesions; lambs are susceptible.

Good pictures of scrapie were shown and described by Dr. Stuart; it is a fatal neurosis with pruritis and no lesions.

**AVMA Affairs.** Dr. Aitken provided information, rather than propaganda. He explained some of the difficult functions of the AVMA, such as answering innumerable questions from all sorts of people, and assisting displaced veterinarians who arrive from the lands behind the iron curtain and need help. He explained the reasons for, and functioning of, the Council on Education of which he has been a member, which developed after the war from the old Committee because of the pressure of GI registrants. He also explained the publication policies and the difficulties involved in getting papers into print. From 1443 pages in 1920, and 1521 in 1941, the AVMA publications have risen to 2116 in 1952.

**Rabies.** Dr. Zeissig, now with Merck, told of the battle against rabies in New York State, in which he engaged as consultant to their health department. It was a stimulating account of difficulties overcome, by a man who overcame them. Dr. Zeissig is absolutely against compulsion and for the educational approach. Rabies can be controlled in dogs by vaccination of 70 per cent or more, or owner-control of dogs (if possible) and the public will cooperate if properly approached. The disease can be controlled in foxes by competent trapping along county-wide lanes. The disease must be surrounded and pushed to the center of an area, not merely followed around the state.

### Conference Publicity

Besides the usual press releases, broadcasts from Station KFBK were released through Bakersfield, Modesto, Fresno, Stockton and Reno stations. In an interview broadcast January 31, President Inman spoke on general aspects of the meeting, and on January 27 Dr. J. E. Stuart and Dr. Blaine McGowan discussed the recent outbreaks of scrapie and blue tongue. An interview with Dr. Zeissig was to be released at a later date. The *Sacramento Bee* published an excellent report on the material on virus control contributed by Dr. James E. Baker and Dr. V. J. Cabasso, and on vascular diseases by Dr. Bankowski.



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## Student AVMA Chapter News From Davis

The fall semester of 1952-53 has been an interesting and successful period for chapter activities. The program for this semester has been guided to increase the professional knowledge of the student and yet offer some social activities.

On September 30th an introductory meeting was held and President W. Kortum welcomed the class of 1956. Dean Hart introduced the faculty and presented an interesting talk on the school's foundation.

The lecture series this semester has been particularly outstanding. On October 23rd Dr. R. V. Ormsbee of Stockton spoke to the group on "The Role of the Veterinarian in Preventing Disease by Assisting in Dairy Herd Management." He outlined his own practice and gave some helpful hints on handling dairy animals.

Dr. Harold Groth of San Mateo spoke on November 13th on "Small Animal Practice," pointing out some of the shortcomings of recent graduates upon entering practice.

On December 11th Dr. A. S. Robertson of Madera gave an interesting talk on his experiences while practicing in Singapore. He told of some of the problems a veterinarian must face in the Orient and concluded the program with several films showing dairies, animal types and other interesting scenes from that part of the world.

For our concluding program of the semester Mr. Ralph Pettit, a practicing attorney from Sacramento, spoke on "Medical-Legal Aspects of Veterinary Medicine." Some good advice was given on insurance, expert testimony and other legal phases of practice.

Each year a representative is selected to attend the AVMA convention. Last June Bob Abbott was chosen to represent the chapter at Atlantic City and he enjoyed an interesting and informative trip. He reported on the convention activities and brought back many new ideas from other student chapters.

The social program for this semester, although limited in scope, has been very successful. The initiation picnic, following a week of initiating the freshman class, went off as planned with no casualties. Credit must be given to the "Vet-Sci" wives for their outstanding formal dance held at the Senator Hotel. Both faculty and students enjoyed an evening of dancing and entertainment.

The officers for this semester certainly deserve credit for their planning and organization. They include: President William Kortum; Vice-President, Jim Steere; Secretary, Larry Proctor; and Treasurer, Jack Tucker.

On December 11th the student association presented Dr. J. Traum with a gift as a farewell gesture. This is a small token for the years of service and contributions Dr.

Traum has given the University of California and a demonstration of the high esteem in which he is held by the students.

One of the foremost research workers in veterinary medicine and one of the early planners of our veterinary school, Dr. Traum is retiring in July and will then be associated with the Bureau of Animal Industry's new foot and mouth disease laboratory on Plum Island.



DR. J. TRAUM

Dr. Traum was appointed to the University of California in 1914. The research conducted by him during these years has mainly been in the fields of brucellosis, tuberculosis and vesicular viruses. Dr. Traum was the first to describe brucella suis in swine (1914). Two years later he described the so-called skin tuberculosis and showed its importance in inducing tuberculin reactions. In 1934 he reported on a new disease, vesicular exanthema of swine. An authority on foot and mouth disease, he has served on commissions in Europe and Mexico. We wish Dr. Traum continued success in his new position.

Dr. J. R. Douglas, associate professor of parasitology, is on sabbatical leave and has taken a Fulbright scholarship to study in New Zealand. In his absence Dr. N. Baker has assumed his responsibilities.

Other recent staff appointments (June, 1952) include Dr. B. McGowan, who has done a fine job as ambulatory clinician. Drs. McGowan and Baker were the first of the California graduates to enter the academic field.

Due to the fact that our alumni organization is in the process of formation, alumni news is rather meager but we hope to remedy this situation in coming editions.

We encourage alumni to forward items of interest to the Publications Committee, Student AVMA Chapter, School of Veterinary Medicine, University of California, Davis.—JAMES L. BITTLE, '53.



### Progress in Brucellosis Control

In a talk before the Dairy Department of the California Farm Bureau Federation in November, Dr. A. G. Boyd reported that continued progress has been made since the beginning of our program to build up a young dairy cattle population with a high degree of resistance to brucellosis. It is estimated that more than 90 per cent of the eligible dairy calves and 60 per cent of the beef calves are vaccinated.

Herd surveys have been made during the past year in Humboldt, Del Norte, and Sacramento Counties by means of the A.B.R., or ring test, on composite samples of milk. The results, while preliminary, are gratifying. It is still too early, however, to draw any definite conclusions, because there remain many unvaccinated older cattle in our herds.

Dr. Boyd discussed with the group the proposed new regulations, dealing with the movement of dairy cattle into the state and within the state; the identification of reactors and their movement; and regulation of tests for brucellosis in cattle.

### Halverson Heads APHA

Dr. Wilton L. Halverson, California's Director of Public Health, assumed the presidency of the American Public Health Association at its 80th annual meeting in October. Since his appointment as State Director of Public Health, Dr. Halverson has been active in national and international public health organizations. He served as alternate delegate from the United States to the First World Health Assembly at Geneva, Switzerland, and the second meeting of the executive board of WHO in 1948. He was president of the Association of State and Territorial Health Officers in 1949-1950, and president of the United States-Mexico Border Public Health Association in 1951-1952. For six months beginning August 15, 1951, Dr. Halverson headed a team of experts sent to Latin America by the Institute of Inter-American Affairs and the Public Health Service to conduct a survey of the Institute's health program there.

### \$3,000 in Cash Prizes Offered

A \$3,000 cash prize contest for seniors in accredited veterinary colleges of the United States has been announced by Associated Serum Producers. Prizes will be awarded for the best papers on "Veterinary Public Relations." There will be first and second national awards of \$1000 and \$300, and seventeen prizes of \$100 for winners from each college. Particulars of the contest have been sent to all the senior students.

### California Cattlemen's Association

Members of the California Cattlemen's Association, meeting for their 36th annual convention at San Diego in December, elected Jake Schneider of Sloughhouse president, and James Sinton of Shandon vice-president. Kenneth Sexton and Robert O. Johnson continue their terms as vice-presidents. J. Edgar Dick was retained as secretary for another year. President Schneider has been active in the association for many years. He has been State Director from District 12 for many years, and is past president of the Amador-El Dorado-Sacramento branch of the association. He has been a member of the Finance and General Resolutions Committee for several years, and has been active in legislative matters at Sacramento for the past ten years. Vice-President Sinton has served as president of the San Luis Obispo branch of the association, and for many years as a member of the Transportation Committee and Livestock Program Committee.

### AVMA Humane Act Award

Any boy or girl living in North America, not over 18 years old, who has been exceptionally kind to animals or who has shown outstanding bravery in the rescue or defense of animals may be nominated for the AVMA National Humane Act Award. Any person, organization, or agency, may make the nomination. Nominations giving full details about the kind act and the address of the nominee should be sent not later than May 1, 1953, to the American Veterinary Medical Association, 600 South Michigan Avenue, Chicago 5, Ill. In addition to the first award, which includes a government savings bond and a national citation, a certificate of merit will be presented to boys and girls who have performed acts of kindness worthy of special recognition.

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## Mixed Practice for Sale

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## For Sale or Lease

Small animal hospital, outstanding building and location, good gross in America's hot spot, the San Fernando Valley, the fastest growing community in California. Desire purchasers or operators who wish to continue present thriving business. Box A-1, CALIFORNIA VETERINARIAN.

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## Equipment for Sale

Equine mouth speculum with files and balling gun; pig obstetrical forceps and other small articles. Also beautiful inlaid wood, glass front instrument display cabinet. Write Dr. B. T. Woodward, 2315 Riverside Drive, Santa Ana, Calif.

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M. H. Conklin, Mill Valley. Vouchers: A. M. McCapes, R. B. Griffenhagen  
J. A. Howarth, Davis. Vouchers: D. E. Jasper, H. S. Cameron  
Robert C. Schock, Los Angeles. Vouchers: H. S. Cameron, D. E. Madsen  
Clifford Wesley Turner, Auburn. Vouchers: Fred W. Williams, F. M. McIntyre  
Ralph D. Westfall, Colusa. Vouchers: W. J. Zontine, A. M. McCapes  
Nelson D. Crandall, Artesia. Vouchers: C. Ross Dean, C. E. Wicktor

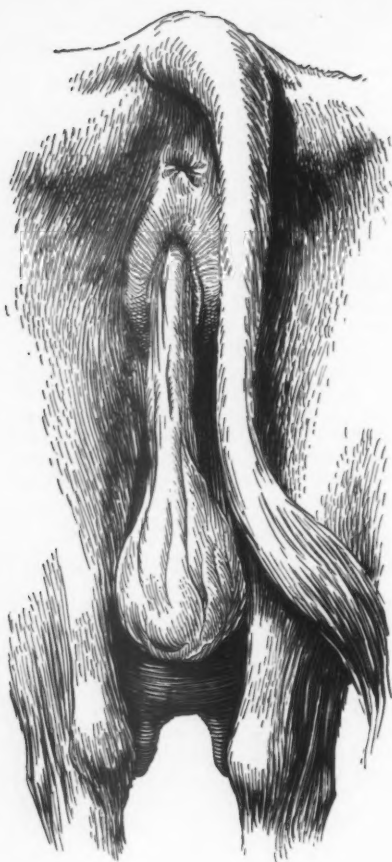
## Use of Progesterone

(Continued from page 19)

after 48 hours, the animal is reinjected with progesterone. Abolition of the straining allows early removal of the sutures, eliminating the hazard of valva laceration when labor occurs.

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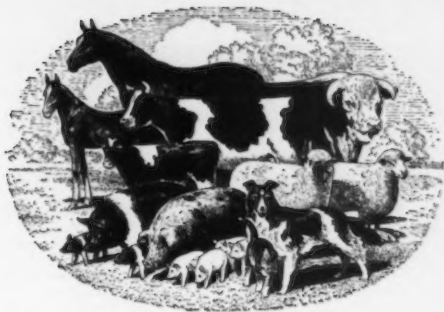


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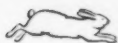


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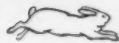
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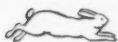
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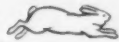
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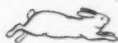
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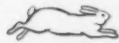
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